

REMARKS

Favorable reconsideration of this application is requested in view of the above newly added claims and the following remarks. Claims 34-38 are newly added. Support for claims 34-38 can be found at least on page 7, claim 20, and Fig. 3 of Applicant's Specification. Claims 17-38 are pending in the case. No new matter has been added. Reconsideration of the claim is respectfully requested.

A. Rejection Under 35 U.S.C. § 102

In paragraph 2 on page 2 of the Office Action, claims 17-33 were rejected as being anticipated by Yatsushiro et al. (US Pat. No. 3,857,053). Applicant respectfully traverses this rejection.

Applicant's claimed inventions set forth a plurality of poles on a rotor defining gaps of different widths. Claims 31-33 also set forth that the plurality of poles are asymmetrically positioned.

Yatsushiro's teachings are in sharp contrast to those of the claimed invention. For example, Yatsushiro discloses a rotor 24 formed from a permanent magnet 26. It then explicitly states that the permanent magnet has thirty poles equally spaced around the periphery of the rotor, and that the poles are 12 degrees apart. (col. 1, line 61 - col. 2 line 2). Figures 3 and 4 in Yatsushiro illustrate a stator 12 having poles 12, 20, 112, and do not illustrate the structure of a rotor 24.

Because Yatsushiro explicitly teaches a rotor assembly 24 having poles 26 equally spaced at 12 degrees, Yatsushiro teaches away from the claimed invention. Furthermore, discloses a motor and not a generator as set forth in the claims.

Therefore, Yatsushiro fails to disclose or suggest the claimed structure, and the claimed invention is patentably distinct from Yatsushiro. Applicant respectfully requests reconsideration and withdrawal from the pending rejection.

B. New Claims

With respect to claim 34, Yatsushiro fails to disclose or suggest at least a synchronous generator including a rotor having a plurality of poles and the poles defining a plurality of gaps,

wherein at least one of the gap has a first width, at least one of the gaps has a second width, and at least one of the gaps has a third width. Yatsushiro merely discloses a stator having a second gap width (G_2) that is greater than a first gap width (G_1), but Yatsushiro fails to disclose that a third gap width (G_3) is different from the first gap width (G_1) and the second gap width (G_2).

With respect to new claim 36, Yatsushiro fails to disclose or suggest a synchronous generator including a rotor having at least the first width being proximate to the second width and less than the second width, and the second width being proximate to the third width and less than the third width, i.e., a gradual increase in the widths of the gaps of proximate poles. With respect to new claim 37, Yatsushiro fails to disclose or suggest at least a synchronous generator including a rotor having the first width being proximate to the second width and greater than the second width, and the second width being proximate to the third width and greater than the third width, i.e., a gradual increase in the widths of the gaps of proximate poles.

Rather, Yatsushiro merely discloses a stator having a second gap width (G_2) that is greater than a first gap width (G_1), but Yatsushiro fails to disclose that a third gap width (G_3) is different from the first gap width (G_1) and the second gap width (G_2).

With respect to claim 38, Yatsushiro fails to disclose or suggest at least a synchronous generator including a rotor having a plurality of poles, the poles having a constant width and defining a plurality of gaps, two or more of the gaps having different widths. Yatsushiro fails to disclose the width of the rotor poles.

Therefore, in view of the above remarks, Applicant's new independent claims and their dependent claims are patentable over the cited reference.

C. Conclusion

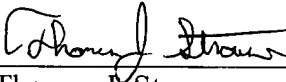
For the foregoing reasons, Applicant respectfully submits that the pending claims are patentably distinct from the cited reference. Applicant requests allowance of all the pending claims and advancement of this patent application toward issuance.

Please note that there may be reasons that the pending claims are patentably distinct from the cited reference in addition to those discussed herein. Applicant reserves the right to raise any such arguments in the future. Please contact the undersigned attorney if there are any questions that can be addressed to advance the claims to allowance or otherwise advance the patent application towards issuance.

Respectfully submitted,

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